

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,131	07/13/2001	Yoshiharu Doi	NAK1-BP43	3858
21611	7590 01/16/2004		EXAM	INER
SNELL & WILMER LLP			PEREZ, ANGELICA	
1920 MAIN STREET			ART UNIT	PAPER NUMBER
SUITE 1200 IRVINE, CA	92614-7230		2684	S.
			DATE MAILED: 01/16/200-	₄ <i>U</i>

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE Of THIS COMMUNICATION Detailed for this problem is the share this (Opding, a reply write the section of their problem is the share this (Opding, a reply write the section of their problem is the share this (Opding, a reply write the section of their problem is the share this (Opding, a reply write the section of their problem is the share this (Opding, a reply write the section of their problem is the share this (Opding, a reply write the section of their problem is the share this (Opding, a reply write the section of this (Opding) days will be considered stinely If the problem of they specified above, the macromunication is the share this (Opding) and the section of the communication of the communication Appropriet and the share the communication of the communication, even if the problem is communication Appropriet and the share the share the communication of the communication, even if the problem is communication Appropriet and the share the		Application No.	Applicant(s)					
Examiner				J				
Angelica M. Perez 2684 Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. 1 The period for reply specified before is less than thirty (30 days, a reply wheth the stationy minimum of thirty (30) days will be considered lamely. 1 If the period for reply specified before is less than thirty (30 days, a reply wheth the stationy minimum of thirty (30) days will be considered lamely. 1 If the period for reply is specified before, it is making the period of the communication. 1 If the period for reply is applicated before, it is making the period of the communication. 1 If the period for reply is applicated before, it is making the period of	Office Action Summary		· · · · · · · · · · · · · · · · · · ·	***************************************				
Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Estansismo from may be available under he provisions of 3 CFR 1.138(s). In or event, however, may a reply be timely filed after SX. 69 NACNTHS from the training date of this communication of 3 CFR 1.138(s). In or event, however, may a reply be timely filed after SX. 69 NACNTHS from the training date of this communication, reply within the stabulacy minimum of thirty (30) days will be considered timely. If NO period to reply is specified bloods, he mandrum statutory period will exploy and will exploy SK(s) MACNTHS from the realizing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ARANCOKED (38 U. 8.C. § 133). This action is FINAL. 20 □ Claim(s) 1-12 Is/are pending in the application. 4a) Of the above claim(s)			1	•				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Estatelistor of term may be available used the prevolition of 37 CFR 1.78(s). In no event, however, may a reply be timely filed It the petiod for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If the petiod for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If the petiod for reply specified above, the maximum statutory period will export sky (in MONTHs from the making date of this accommendation. Falses to sept within the set or extended period for reply will, by statutor, clause the spipication to theorize ABANDONED (30 U.S.C. § 130). Parameter of the set of the set of the communication of the communication is promotion to the set of the set of the communication is promotion to the set of the set of the set of the set of the communication is promotion to the set of t	The MAILING DATE of this communication		ith the correspondence ad	dress				
THE MAILING DATE OF THIS COMMUNICATION. Esteations of time may be available under the providence of 3 CFR 1.13(a). In no event, however, may a reply be timely filled after SIX (3) MOSTH'S from the mailing date of this communication. Providence of 3 CFR 1.13(a). In no event, however, may a reply be timely filled after SIX (3) MOSTH'S from the mailing date of this communication. Providence of the providenc	Period for Reply							
This action is FINAL. 2b) □ This action is FINAL. 2b) □ This action is non-final. 3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Clairms 4) □ Clairm(s) 1-12 is/are pending in the application. 4a) □ Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) is/are objected to. 8) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: □ □ Certified copies of the priority documents have been received. □ □ Certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rul 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) □ The translation of the foreign language provisional application rian an Application Data Sheet. 37 CFR 1.78. Altachment(s) 10 □ Notice of References Cited (PTO-892) 30 □ Notice of References Cit	 THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any 							
2a) ☐ This action is FINAL. 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☐ Claim(s) 1-12 Is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 1-12 Is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in aboyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Cropies of the certified copies of the priority documents have been received in Application No 3. ☐ Cropies of the certified copies of the priority documents have been received in Application Application Paperson's calaim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121 since a specific reference was included in the first sen		40 1.4. 0004						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 9) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1 Certified copies of the priority documents have been received. 2 Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in Application Tome International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority un								
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)								
4) Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * Col None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. All □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.	Disposition of Claims							
5) ☐ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are objected to. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * C ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Informal Patent Application (PTO-152)								
6) ☐ Claim(s) 1-12 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Informal Patent Application (PTO-152)								
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) Action of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)	·							
Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Informal Patent Application (PTO-152)	,—							
Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Informal Patent Application (PTO-152)		and/or election requirement.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Informal Patent Application (PTO-152)								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference Cited (PTO-892) 3) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 5) Notice of Informal Patent Application (PTO-152)								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) Anotice of References Cited (PTO-892) 2) Notice of Brafsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. §§ 119 and 120 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) ☐ The translation of the foreign language provisional application has been received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Priority under 35 U.S.C. §§ 119 and 120 12)	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152)								
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 5) Notice of Informal Patent Application (PTO-152)		forcing priority under 25 II S C	8 119(a) ₋ (d) or (f)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152)	a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)			0	(-)				
	2) Notice of Draftsperson's Patent Drawing Review (PTO-9	948) 5) Notice o						

Application/Control Number: 09/905,131

Art Unit: 2684

DETAILED ACTION

Page 2

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda (Ikeda et al.; Pub. No.: US 2001/0055948 A1) in view of Ogino (Ogino, Tooru; Pub. No.: US 2001/0029173 A1).

Regarding claims 1, 5 and 9, Ikeda teaches of a mobile communication terminal and method (paragraph 0002, lines 1-4) for performing reception and transmission (paragraph 0011, lines 1-9) using an adaptive array method (paragraph, 0011, 1-9), (b) reception means for forming a directivity pattern (paragraph 0007, 3-8) for receiving a desired reception signal and receiving the reception signal using the formed directivity pattern (paragraph 0011, 1-9), and (c) transmission means for transmitting a transmission signal using the directivity pattern formed in reception (paragraph 0008). In addition, Ikeda teaches of a program to perform the method described (paragraph 0038).

Ikeda does not explicitly teach where the mobile communication terminal is provided with (a) a plurality of antennas and where it comprises: detection mean for detecting a reception error in the reception signal so that a pattern

Application/Control Number: 09/905,131

Art Unit: 2684

different from the directivity pattern formed in reception is formed and the transmission signal is transmitted in the formed pattern.

In related art related to a portable telephone apparatus that deals with can directivity of antennas, Ogino teaches where the mobile communication terminal is provided with (a) a plurality of antennas (0012, lines 1-4). Also, he teaches of detection means for detecting a reception error in the reception signal (0058, lines 1-2 and figure 7, item 610); and transmission control means for controlling the transmission means when the detection means detects the reception error (paragraph 0058 and claim 9; where the pattern is changed when the directivity of the antenna is changed).

Regarding claims 2, 6 and 10, Ikeda in view of Ogino teaches all the limitations according to claim 1. Ogino further teaches where when the detection means detects the reception error, the transmission control means controls the transmission means so that the non-directional pattern is formed using one of the plurality of antennas (refer to claims 9 and 11; where the change of directivity assumes a new pattern), and the transmission signal is transmitted in the non-directional pattern (refer to claims 9 and 11; where the BER provides information regarding signal error).

Regarding claims 3, 7 and 11, Ikeda in view of Ogino teaches all the limitations according to claim 2. Ogino further teaches where when the detection means detects the reception error, the transmission control means controls the transmission means so that the non-directional pattern is formed using one of the plurality of antennas that has the largest antenna gain, and the transmission

Art Unit: 2684

signal is transmitted in the non-directional pattern (paragraphs 0065 and 0066; where the "largest antenna gain" is inherent in the "selection of the optimal reception state").

Regarding claims 4, 8 and 12, lkeda in view of Ogino teaches all the limitations according to claim 2. Ogino further teaches where the communication terminal further includes selection means for measuring a quality of the reception signal for each of the plurality of antennas and selecting an antenna with the highest reception quality, wherein when the detection means detects the reception error, the transmission control means controls the transmission means so that the non-directional pattern is formed using the antenna selected by the selection means, and the transmission signal is transmitted in the non-directional pattern (paragraph 0066 and 0073; where the "the highest reception quality" corresponds to the "selection of the optimal reception state". Also, since the selection operation takes place, it implies that the terminal includes the measuring means).

Art Unit: 2684

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent No.: 6,463,303 B1; deals with beam forming and selection to provide desired signals to/from processing devises.

US Patent No.: 6,317,611; refers to a communication device with adaptive antenna.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is

Angelica Perez (Examiner)

703-306-0377.

December 30, 2003

Art Unit 2684